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EXAMINER

ARTHUR JEANGLAUME, GERTRUDE

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID A. JACKSON, MICHAEL J. ROBB
and PATRICK B. O'MAHONY

Appeal 2009-001144
Application 10/628,044
Technology Center 3600

Decided:¹ July 17, 2009

Before LINDA E. HORNER, JOHN C. KERINS and
STEVEN D.A. McCARTHY, *Administrative Patent Judges*.

McCARTHY, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304 (2008), begins to run from the Decided Date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or the Notification Date (electronic delivery).

1 STATEMENT OF THE CASE

2 The Appellants appeal under 35 U.S.C. § 134 (2002) from the
3 Examiner's decision finally rejecting claims 1, 9, 15 and 24-26 under 35
4 U.S.C. § 102(e) (2002) as being anticipated by Larson (US 6,370,455 B1,
5 issued Apr. 9, 2002); and finally rejecting claims 2-8, 10-14 and 16-23 under
6 35 U.S.C. § 103(a) (2002) as being unpatentable over Larson and Jackson
7 (US 5,809,658, issued Sep. 22, 1998). We have jurisdiction under 35 U.S.C.
8 § 6(b) (2002).

9 We REVERSE.

10 Claim 9 is typical of the claims on appeal:

11
12 9. A method of diagnosing a
13 malfunction during the operation of an instrument
14 that gathers and analyzes real-time wheel
15 alignment data comprising:
16 receiving real-time wheel alignment data
17 from at least one information-gathering device;
18 storing the real-time wheel alignment data in
19 a memory device;
20 re-playing the stored, real-time wheel
21 alignment data; and
22 analyzing the re-played data to diagnose a
23 malfunction.

24
25 Independent claims 1 and 26 recite a data replay system in
26 communication with a memory device for playing back real-time data
27 associated with a vehicle, and with an instrument, after the real-time data is
28 gathered. Independent claim 6 recites a play-back control for causing a
29 display device to selectively display images and analysis data to a service
30 technician in response to activation of the play-back control after the

1 occurrence of a malfunction. Independent claim 15 recites playback means
2 for re-playing stored, real-time wheel alignment data. Independent claims
3 21-23 recite a play-back control or play-back control means for causing a
4 display device or means to selectively display images or analysis data
5 generated based on the images. Independent claim 25 recites a play-back
6 control device for causing a display device to selectively display sensed
7 signals stored in a data storage device. Independent claim 24 includes
8 means for replaying stored, real-time data associated with the operations of a
9 vehicle test instrument.

10

11 ISSUES

12 The Appellants contend that Larson fails to disclose playing back real-
13 time data after the data is gathered. (Br. 14-15.) The Appellants further
14 contend that the teachings of Jackson fail to make up this deficiency. (Br.
15.) This appeal turns on two issues:

16 Have the Appellants shown that the Examiner erred in
17 finding that Larson discloses playing back real-time wheel
18 alignment data after the data is gathered?

19 Have the Appellants shown that the Examiner failed to
20 articulate reasoning with some rational underpinning sufficient
21 to support the conclusion that one of ordinary skill in the art
22 would have had reason to play back real-time wheel alignment
23 data in a system or method which diagnoses malfunctions after
24 the data is gathered?

FINDINGS OF FACT

2 The record supports the following findings of fact (“FF”) by a
3 preponderance of the evidence.

4 1. The ordinary meaning of the term “real-time data” is data that
5 recreates events that occur in real-time. (*See* Br. 13.)

6 2. Jackson discloses wheel alignment apparatuses for a motor
7 vehicle. (Jackson, col. 6, ll. 52-56.)

8 3. Each of Jackson's individual wheel alignment apparatuses
9 includes a video camera 30 which is in electrical communication with a
10 computer 32. (*Id.*)

11 4. Jackson's video camera 30 transmits real-time images of targets
12 placed on the wheels of a vehicle for processing by the individual wheel
13 alignment apparatus computer 32. (*See* Jackson, col. 8, ll. 14-16.)

14 5. Jackson's individual wheel alignment apparatus computer 32
15 processes the images and performs calculations to determine the true
16 orientation of the wheels relative to the view paths of the video camera 30.
17 Jackson's computer 32 displays the results of the calculations. (Jackson, col.
18 8, ll. 17-32.)

19 6. Jackson does not disclose displaying detected images.

20 7. Larson discloses providing a service computer *16* at a remote
21 location *10B* with access to one or more individual vehicle wheel alignment
22 system computers *12A-12D* similar to the individual wheel alignment
23 apparatus computers disclosed by Jackson. Larson discloses providing the
24 service computer *16* access to the individual vehicle wheel alignment system
25 computers *12A-12D* for several purposes, including providing remote

1 diagnostic procedures on the individual vehicle wheel alignment system
2 computers *12A-12D*. (Larson, col. 5, l. 60 – col. 6, l. 2 and Fig. 1A.)

3 8. Larson's service computer *16* receives data from the individual
4 vehicle wheel alignment system computers *12A-12D*. (Larson, col. 7, l. 65 –
5 col. 8, l. 11.)

6 9. The passages of Larson cited by the Examiner do not describe
7 the transmission of real-time data, such as image data, from the individual
8 vehicle wheel alignment system computers *12A-12D* to the service computer
9 *16*.

10 10. The data received and stored by Larson's service computer *16*
11 includes current program log files for performing error detection. (Larson,
12 col. 8, l. 29-34.)

13 11. The passages of Larson cited by the Examiner do not describe
14 the contents of the current program log files. The log files do not necessarily
15 contain data that recreates events that occur in real-time.

16 12. Larson discloses that the received information from the wheel
17 alignment computers *12A-12D* may be utilized by the service computer
18 software in the generation of reports or other summary data compilations for
19 presentation to an operator on a display screen or printer. (Larson, col. 8, ll.
20 35-39.)

21 13. The passages of Larson cited by the Examiner do not disclose
22 the content or format of the reports or other summary data compilations
23 presented to the operator on the display screen. The reports or other
24 summary data compilations do not necessarily contain data that recreates
25 events that occur in real-time.

1 14. Neither Jackson nor Larson discloses playing back real-time
2 wheel alignment data after the data is gathered.

3

PRINCIPLES OF LAW

5 A claim under examination is given its broadest reasonable
6 interpretation consistent with the underlying specification. *In re Am. Acad.*
7 *of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). In the absence of
8 an express definition of a claim term in the specification, the claim term is
9 given its broadest reasonable meaning in its ordinary usage as the term
10 would be understood by one of ordinary skill in the art. *In re ICON Health*
11 *& Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007); *In re Morris*, 127
12 F.3d 1048, 1054 (Fed. Cir. 1997). Our reviewing court disfavors any claim
13 interpretation which renders language in the claim superfluous. *Stumbo v.*
14 *Eastman Outdoors, Inc.*, 508 F.3d 1358, 1362 (Fed. Cir. 2007).

15

ANALYSIS

17 The Appellants do not define the term “real-time data” in the
18 Specification. Nevertheless, the Appellants’ proffered definition of the term,
19 namely, data that recreates events that occur in real-time, most closely
20 corresponds to both the ordinary usage of the term (*see* FF 1), and to the
21 usage of the term in the Specification. Defining the term sufficiently
22 broadly to include any data gathered in real-time or relating an event
23 observed in real-time would render the term superfluous, since, as the
24 Examiner points out (*see* Ans. 5), most data are gathered in real-time.
25 Therefore, the broadest reasonable interpretation of the term “real-time data”
26 is limited to data that recreates events that occur in real-time.

Neither Jackson nor Larson discloses playing back real-time wheel alignment data after the data is gathered. Although Larson discloses storing some data, such as current program log files (FF 10), Larson does not necessarily disclose storing real-time wheel alignment data. (FF 11.) Although Larson discloses presenting reports or other summary data compilations to an operator on the display screen (FF 12), Larson does not necessarily disclose presenting real-time wheel alignment data on the display screen. (FF 13.) Although Jackson discloses displaying the results of calculations on a video display unit (FF 5), Jackson does not disclose *playing back* data or images after the data or images are gathered. (See FF 6 and 11.)

12 Larson does not disclose playing back real-time wheel alignment data.
13 Since Jackson does not disclose playing back real-time data either, the
14 Examiner's reasoning that it would have been obvious "that *at least part of*
15 *the real time data transmitted and received by Larson et al.* (also using a
16 typical wheel alignment system) was obtained by optical means and
17 presented during the analysis as images" (Ans. 4 [emphasis added]), lacks
18 rational underpinning in the evidence on which the Examiner relies.

20 CONCLUSIONS

21 The Appellants have shown that the Examiner erred in finding that
22 Larson discloses playing back real-time wheel alignment data after the data
23 is gathered. Therefore, the Appellants have shown that the Examiner erred
24 in rejecting claims 1, 9, 15 and 24-26 under § 102(e) as being anticipated by
25 Larson.

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1 The Appellants have shown that the Examiner failed to articulate
2 reasoning with some rational underpinning sufficient to support the
3 conclusion that one of ordinary skill in the art would have had reason to play
4 back real-time wheel alignment data in a system or method which diagnoses
5 malfunctions after the data is gathered. Therefore, the Appellants have
6 shown that the Examiner erred in rejecting claims 2-8, 10-14 and 16-23
7 under § 103(a) as being unpatentable over Larson and Jackson.

8

9

DECISION

10 We REVERSE the Examiner's decision rejecting claims 1-26.

11

12

REVERSED

13

14

15 mls

16

17

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